ELSEVIER

Thin Solid Films 355–356 (1999) 542–543

thin solid films

Author Index of Volume 355–356

Ahmed, W., 134, 162
Ahn, J., 174
Aldinger, F., 96
Ali, N., 134, 162
Allen, P.B., 295
Andritschky, M., 465
Arnell, R.D., 263
Augereau, F., 347
Awan, S.A., 456

Babaev, V., 96
Baik, H.K., 55, 223, 239
Baranauskas, V., 60, 157, 184, 233, 446
Barber, Z.H., 117
Barkley, R., 79
Baumgärtner, K.M., 96
Baunack, S., 316
Ben el Mekki, M., 89
Bendavid, A., 6
Berríos, J.A., 480, 487
Bhushan, B., 330
Bica de Moraes, M.A., 184
Bin Li, B., 184
Bobzin, K., 367
Bodart, F., 357
Bouchet, J., 270
Bouzakis, K.D., 322
Boydston, N., 295
Brückner, W., 316
Bregadze, A., 96
Briggs, G.A.D., 500
Brown, W.D., 139, 343
Bucaro, M.A., 536
Byon, E.-s., 229

Callahan, J.H., 536
Cameron, D.C., 79, 85
Castro, G., 472
Castro, S.G., 157, 184
Chang, C.L., 246
Chang, C.Y., 451
Chang, T.C., 451
Chen, H.Y., 374
Chen, J.Y., 412
Chen, K.H., 112, 205, 417
Chen, L.C., 112
Chen, L.C., 205, 417
Chen, L.J., 412
Chen, Y.F., 205
Cheng, L.W., 412
Cheng, S.L., 412
Chi, E.J., 223
Chitty, J., 480, 487
Chowdhury, A.K.M.S., 79, 85
Chrisey, D.B., 536
Christou, C., 117
Chudoba, T., 284
Chung, R., 536
Cockeram, B.V., 17
Collins, M., 79
Contreras, G., 480
Cremer, R., 127
Cunha, L., 465

Dahl, S., 290
Dariel, M.P., 380
David, K., 322
Descamps, J.-C., 357
DeVries, M., 26
Dillon, R.O., 1
Dinelli, F., 500
Djouadi, M.A., 89
Dorner, A., 214
Durrant, S.F., 157, 184, 233
Dyrda, K., 277

Eggimann, F., 49
Erdmann, J., 41
Esteve, J., 210
Eun Kim, C., 531
Evetts, J.E., 117

Fajardo, C., 480
Faller, C., 49
Fan, C.W., 205
Fan, Q.H., 162
Fernandez, G., 513
Ferreira, J., 194
Frank, M., 127
Fujimoto, T., 385

Garcés, Y., 487
Gopinathan, N., 401
Gould, R.D., 456
Gravano, S., 456
Griffiths, P., 513
Grill, A., 189
Grovenor, C.R.M., 500
Guiot, E., 89
Guo, Y.P., 174
Guseva, M., 96

Ha, S.M., 525, 531
Hale, J.S., 26
Hamelin, P., 270
Hassan, I.U., 134, 162
Hayes, J., 194
He, X.M., 167
Henry, B.M., 500
Hintermann, H., 480, 487
Ho, W.Y., 246
Hofmann, S., 390
Hosseini-Tehrani, A., 513
Howard, J.T., 295
Howson, R.P., 500
Huan, A.C.H., , 174
Huang, J.H., 440
Huang, L.J., 353
Huang, Q.F., 174
Huang, Y.S., 205
Hung Wu, C., 179
Hung, Y., 353
Hutchings, I.M., 117
Hwa, L.G., 417
Hwan Kim, Y., 199

Jamting, Å., 6
Jankowski, A., 194
Jeong, S.M., 55
Joon Chi, E., 199
Jun Choi, D., 199
Jung, H.S., 151

Kang, M.G., 423, 435
Kassing, R., 406
Kato, Y., 337
Khabari, A., 513
Khalifa, F.A., 343
Khan, M.A., 139
Khvostov, V., 96
Kichambare, P.D., 112
Kim, C., 252
Kim, D.-H., 525
Kim, I.K., 239
Kim, J.-W., 423
Kim, S.-M., 461
Kim, T., 353
Kim, T.S., 525
Kim, Y.K., 239
Kirchhoff, J.F., 363
Klemberg-Sapieha, J.E., 290
Kojima, I., 385, 390
Kolesar, E.S., 295
Kolosov, O.V., 500
Konyashin, I., 96
Koo Baik, H., 199
Kreissig, U., 64
Kulisch, W., 406
Kumar, R.S., 500
Kuo, C.T., 112, 417
Kuo, P.F., 205
Kusano, Y., 117

Laukaitis, G., 430
Le Huu, T., 122
Lee, D.Y., 239
Lee, S.-h., 229
Lee, S.-r., 229
Lee, S.T., 167
Lee, S.Y., 151, 461
Lemmer, O., 127
Leonhardt, D., 536
LeskeläM., 430
Lewis, D.B., 472
Leyendecker, T., 127
Leys, Y., 357
Li, B., 385
Li, B.B., 157, 233
Li, G., 353
Li, X., 330

PII: S0040-6090(99)00866-4

ELSEVIER

Thin Solid Films 355–356 (1999) 542–543

thin solid films

Author Index of Volume 355–356

Ahmed, W., 134, 162
Ahn, J., 174
Aldinger, F., 96
Ali, N., 134, 162
Allen, P.B., 295
Andritschky, M., 465
Arnell, R.D., 263
Augereau, F., 347
Awan, S.A., 456

Babaev, V., 96
Baik, H.K., 55, 223, 239
Baranauskas, V., 60, 157, 184, 233, 446
Barber, Z.H., 117
Barkley, R., 79
Baumgärtner, K.M., 96
Baunack, S., 316
Ben el Mekki, M., 89
Bendavid, A., 6
Berríos, J.A., 480, 487
Bhushan, B., 330
Bica de Moraes, M.A., 184
Bin Li, B., 184
Bobzin, K., 367
Bodart, F., 357
Bouchet, J., 270
Bouzakis, K.D., 322
Boydston, N., 295
Brückner, W., 316
Bregadze, A., 96
Briggs, G.A.D., 500
Brown, W.D., 139, 343
Bucaro, M.A., 536
Byon, E.-s., 229

Callahan, J.H., 536
Cameron, D.C., 79, 85
Castro, G., 472
Castro, S.G., 157, 184
Chang, C.L., 246
Chang, C.Y., 451
Chang, T.C., 451
Chen, H.Y., 374
Chen, J.Y., 412
Chen, K.H., 112, 205, 417
Chen, L.C., 112
Chen, L.C., 205, 417
Chen, L.J., 412
Chen, Y.F., 205
Cheng, L.W., 412
Cheng, S.L., 412
Chi, E.J., 223
Chitty, J., 480, 487
Chowdhury, A.K.M.S., 79, 85
Chrisey, D.B., 536
Christou, C., 117
Chudoba, T., 284
Chung, R., 536
Cockeram, B.V., 17
Collins, M., 79
Contreras, G., 480
Cremer, R., 127
Cunha, L., 465

Dahl, S., 290
Dariel, M.P., 380
David, K., 322
Descamps, J.-C., 357
DeVries, M., 26
Dillon, R.O., 1
Dinelli, F., 500
Djouadi, M.A., 89
Dorner, A., 214
Durrant, S.F., 157, 184, 233
Dyrda, K., 277

Eggimann, F., 49
Erdmann, J., 41
Esteve, J., 210
Eun Kim, C., 531
Evetts, J.E., 117

Fajardo, C., 480
Faller, C., 49
Fan, C.W., 205
Fan, Q.H., 162
Fernandez, G., 513
Ferreira, J., 194
Frank, M., 127
Fujimoto, T., 385

Garcés, Y., 487
Gopinathan, N., 401
Gould, R.D., 456
Gravano, S., 456
Griffiths, P., 513
Grill, A., 189
Grovenor, C.R.M., 500
Guiot, E., 89
Guo, Y.P., 174
Guseva, M., 96

Ha, S.M., 525, 531
Hale, J.S., 26
Hamelin, P., 270
Hassan, I.U., 134, 162
Hayes, J., 194
He, X.M., 167
Henry, B.M., 500
Hintermann, H., 480, 487
Ho, W.Y., 246
Hofmann, S., 390
Hosseini-Tehrani, A., 513
Howard, J.T., 295
Howson, R.P., 500
Huan, A.C.H., , 174
Huang, J.H., 440
Huang, L.J., 353
Huang, Q.F., 174
Huang, Y.S., 205
Hung Wu, C., 179
Hung, Y., 353
Hutchings, I.M., 117
Hwa, L.G., 417
Hwan Kim, Y., 199

Jamting, Å., 6
Jankowski, A., 194
Jeong, S.M., 55
Joon Chi, E., 199
Jun Choi, D., 199
Jung, H.S., 151

Kang, M.G., 423, 435
Kassing, R., 406
Kato, Y., 337
Khabari, A., 513
Khalifa, F.A., 343
Khan, M.A., 139
Khvostov, V., 96
Kichambare, P.D., 112
Kim, C., 252
Kim, D.-H., 525
Kim, I.K., 239
Kim, J.-W., 423
Kim, S.-M., 461
Kim, T., 353
Kim, T.S., 525
Kim, Y.K., 239
Kirchhoff, J.F., 363
Klemberg-Sapieha, J.E., 290
Kojima, I., 385, 390
Kolesar, E.S., 295
Kolosov, O.V., 500
Konyashin, I., 96
Koo Baik, H., 199
Kreissig, U., 64
Kulisch, W., 406
Kumar, R.S., 500
Kuo, C.T., 112, 417
Kuo, P.F., 205
Kusano, Y., 117

Laukaitis, G., 430
Le Huu, T., 122
Lee, D.Y., 239
Lee, S.-h., 229
Lee, S.-r., 229
Lee, S.T., 167
Lee, S.Y., 151, 461
Lemmer, O., 127
Leonhardt, D., 536
LeskeläM., 430
Lewis, D.B., 472
Leyendecker, T., 127
Leys, Y., 357
Li, B., 385
Li, B.B., 157, 233
Li, G., 353
Li, X., 330

PII: S0040-6090(99)00866-4

Liao, Y.C., 417
Lindroos, S., 430
Ling, K.J., 417
Liu, C., 41
Liu, E., 146
Liu, P.T., 451
Lousa, A., 210
Lu, F.H., 374
Lu, T.R., 112, 417
Lugscheider, E., 367

Möller, M., 367
Ma, X., 229
Macrander, A., 41
Martin, P.J., 6
Martinez, E., 210
Martinu, L., 290
McGill, R.A., 536
Measures, D.P., 17
Mehregany, M., 179, 518
Mertens, R., 127
Mestres, N., 89
Minami, T., 35
Miyata, T., 35
Mo, Y.G., 1
Monclus, M.A., 79, 85
Moon, D.W., 390
Moore, J.J., 303
Mor, Y.S., 451
Morse, J., 194
Mortet, V., 89
Moser, E.M., 49
Mslna, T.E., 536
Mueller, A.J., 17
Mustoe, G.G.W., 303

Naseem, H.A., 139, 343
Nastasi, M., 167
Neri, F., 219
Neuschütz, D., 127
Nguyen, C., 363
Nouet, G., 89

O'Hare, I.P., 134, 162
O, B.h., 252
Oechsner, H., 73

Pang, S.S., 151
Park H.-H., 151, 423, 435, 525, 531
Park, S.G., 252
Pascual, E., 210
Paulmier, D., 122
Pelleg, J., 380
Pertuz, A., 480, 487
Peterlevitz, A., 184
Peterlevitz, A.C., 233
Peterlevitz, C., 157
Pietrzko, S., 49
Pinkas, M., 380
Piqué, A., 536
Pischow, K., 465
Pita-Larrañaga, A., 506
Plass, M.F., 406
Popov, C., 406
Poulet, A., 357
Puchi, E.S., 472, 480, 487

Quaas, M., 395
Quade, A., 494

Räuchle, E., 96
Ramirez, F.O., 472
Rangel, E.C., 184
Rar, A., 390
Rats, D., 290, 347
Rego, C.A., 134, 162
Reisse, G., 105
Reisse, G., 256
Reyes-Gasga, J., 506
Rho, S.J., 55
Richter, F., 64, 284
Roberts, A.P., 500
Robinson, C., 401
Roche, A.A., 270
Roquiny, Ph., 357
Rothman, J.B., 363
Rusli, , 174
Ryan, F., 401

Sánchez, H., 487
Sánchez-Pascual, A., 506
Saleh, A.A., 363
Sayer, M., 277
Schürer, C., 214
Schmitt, M., 122
Schwarzer, N., 284
Shaik, A.A., 139
Sharma, P.C., 12
Shi, X., 146
Shih, Y.Z., 353
Shim, J.Y., 223
Shultz, J.L., 343
Sik Kim, W., 531
Snyder, P.G., 1
Song, K.M., 223
Song, K.M., 55
Souza, R.M., 303
Spaeth, C., 64
Spargo, B.J., 536
Staia, M.H., 472
Steffen, H., 395
Sun, X.S., 167
Sun, Y., 229
Sun, Z., 146
Surdutovich, G.I., 60, 446
Sze, S.M., 451

Takeda, N., 337
Takikawa, H., 6
Tamulevičius, S., 430
Tang, K.C., 263
Teo, E.J., 174
Thompson, D.W., 26
Tian, J., 229
Tiwald, T.E., 1, 26
Tosin, M.C., 157, 184, 233
Trimble, C., 26
Trusso, S., 219
Tsai, M.S., 451
Tsai, Y.P., 440
Tsui, B.Y., 412
Tsukahara, Y., 337

Urban III, F.K., 513

Vachet R.W., 536
Valkonen, M.P., 430
Valles-Gonzalez, M.P., 506
VandenBrande, P., 357
Vasi, C., 219
Vidakis, N., 322
Vitlina, R.Z., 60, 446
von Stebut, J., 290, 347

Walter, K.C., 167
Wang, D.Y., 246
Wang, J., 184
Wang, Z., 465
Ward, D.J., 311
Weber, F.R., 73
Wee, A.T.S., 174
Wei, S.L., 112
Weissmantel, S., 105, 256
Wen, C.Y., 205
Wielage, B., 214
Wilken, J.M., 295
Williams, A.F., 311
Won Han, D., 199
Woollam, J.A., 26
Wu, C.-T., 417
Wu, J.J., 112, 205, 417
Wulff, H., 395, 494

Xia, L., 229
Xu, W., 353

Yanaka, M-a., 337
Yang, C.Y., 174
Yang, H., 174
Yang, Y.L., 451
Yoon, S.F., 174
Yota, J., 363
Young Yoon, W., 199
Yu, G.P., 440

Zhang, Q., 174
Zhao, K.Y., 500
Zorman, C.A., 179, 518

ELSEVIER

Thin Solid Films 355–356 (1999) 544–552

thin solid films

Subject Index of Volume 355–356

Absorption
Simple reflectometric method for measurement of weakly absorbing films, 446
Acoustic microscopy
High frequency scanning acoustic microscopy: a novel non-destructive surface analytical tool for assessment of coating-specific elastic moduli and tomographic study of subsurface defects, 347
Adhesion
Characterization of hydrogen-free diamond-like carbon films deposited by pulsed plasma technology, 246
Critical loads and effective frictional force measurements in the industrial scratch testing of TiN on M2 tool steel, 277
Al-films
Investigation of oxidation process on plasma treated thin Al-films by GIXR and GIXRD, 494
Alloys
Stress and oxidation in CuNi thin films, 316
Aluminum coating
A microstructural study of transparent metal oxide gas barrier films, 500
Aluminum enhanced crystallization
In situ analysis of aluminum enhanced crystallization of hydrogenated amorphous silicon (a-Si:H) using X-ray diffraction, 343
Aluminum oxide
A microstructural study of transparent metal oxide gas barrier films, 500
Amorphous carbon coatings
Evaluation of fracture toughness of ultra-thin amorphous carbon coatings deposited by different deposition techniques, 330
Amorphous carbon films
Investigation of tungsten incorporated amorphous carbon film, 174
Field emission characteristics of cesiated amorphous carbon films by negative carbon ion, 199
Amorphous silicon nitride
The effects of substrates on carbon nitride thin films prepared by direct dual ion beam deposition, 239
Angle-resolved X-ray photon spectrometry
Substrate induced DLC film thickness variations, 353
Anisotropy
Unique Brewster-angle window transparent to both polarizations, 60
Annealing
XPS analyses of TiN films on Cu substrates after annealing in the controlled atmosphere, 374
Antireflective coatings
Characterization of SiO_xN_y anti-reflective coatings using SIMS and RBS/HFS, 364
As poly-sulfide
Investigation on the surface characteristics of GaAs after sulfuric-vapor treatment, 423
Atmospheric pressure chemical vapor deposition
Growth of polycrystalline SiC films on SiO_2 and Si_3N_4 by APCVD, 179
Atomic force microscopy
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513

Boron carbide
Effect of ion bombardment on the properties of B_4C thin films deposited by RF sputtering, 210
Boron nitride
Characterization of interface of c-BN film deposited on Si(100) substrate, 229
Brewster angle
Simple reflectometric method for measurement of weakly absorbing films, 446
Brewster window
Unique Brewster-angle window transparent to both polarizations, 60
c-axis orientation
Characterization of YBCO superconducting films fabricated by pulsed laser deposition, 461

Carbon nitride
Investigation of the valence band states of reactively sputtered carbon nitride films, 79
Deposition of carbon nitride films by ionised magnetron sputtering, 117
Carbon nitride films
Nitrogenated diamond produced by introducing ammonia into the gas feed in hot-filament CVD, 157
CN_x thin films grown by pulsed laser deposition: Raman, infrared and X-ray photoelectron spectroscopy study, 219
Carbon nitride layers
Low-energy plasma beam deposition of carbon nitride layers with -C_3N_4-like fractions, 73
Carbon nitride thin films
Effect of substrate bias on the bonding structure of carbon nitride thin films, 85
The effects of substrates on carbon nitride thin films prepared

PII: S0040-6090(99)000851-2

by direct dual ion beam deposition, 239
Plasma chemical vapor deposition of thin carbon nitride films utilizing transport reactions, 406
Carbon–nitrogen bond
Plasma chemical vapor deposition of thin carbon nitride films utilizing transport reactions, 406
Cathodic arc evaporation
Sputtering and chemical erosion during CN_x synthesis by ion beam assisted filtered cathodic arc evaporation, 64
Cation substituted PZT
The effects of cation-substitution on the ferroelectric properties of sol–gel derived PZT thin film for FRAM application, 531
Chemical sensors
Growth of organic thin films by the matrix assisted pulsed laser evaporation (MAPLE) technique, 536
Chemical vapor deposition
Crystalline SiCN: a hard material rivals to cubic BN, 112
Effect of early methane introduction on the properties of nano-seeded MPCVD-diamond films, 139
High rate deposition of diamond-like carbon films by magnetically enhanced plasma CVD, 146
Nitrogenation of diamond by glow discharge plasma treatment, 184
Wide band gap silicon carbon nitride films deposited by electron cyclotron resonance plasma chemical vapor deposition, 205
Cl_2 gas
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
β-C_3N_4
Low-energy plasma beam deposition of carbon nitride layers with β-C_3N_4-like fractions, 73
β-C_3N_4 crystalline films
Effect of substrate bias on the bonding structure of carbon nitride thin films, 85
Coatings
The development and testing of emissivity enhancement coatings for themophotovoltaic (TPV) radiator applications, 17
The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media, 322
Co-evaporation
Composition dependent structural properties of $Pb_{1-x}Eu_xSe$ thin films, 12
Color range
Comparative study of thin film physical properties for TiN_x deposited by DC magnetron sputtering under temperatures less than 100°C on monocrystalline silicon and polycrystalline iron substrates, 357
Combustion flame synthesis
Combustion flame synthesis: a promising technique to obtain diamond single crystal, 122
Compressive stress
Structural and optical properties of titanium oxide thin films deposited by filtered arc deposition, 6
Conductivity
Thermally-actuated cantilever beam for achieving large in-plane mechanical deflections, 295
Copper
Role of surface pre-treatment in the CVD of diamond films on copper, 162
CrN
Microstructure of CrN coatings produced by PVD techniques, 465
Crystalline silicon
The effects of substrates on carbon nitride thin films prepared by direct dual ion beam deposition, 239
Crystalline SiCN
Crystalline SiCN: a hard material rivals to cubic BN, 112
Cubic boron nitride
Synthesis and characterization of c-BN films prepared by ion beam assisted deposition and triode sputtering, 89
Characterization of pulsed laser deposited h-BN films and h-BN/c-BN layer systems, 105
Crystalline SiCN: a hard material rivals to cubic BN, 112
Characterization of ion-assisted pulsed laser deposited cubic boron nitride films, 256
Cubic boron nitride deposition
The mechanism of cubic boron nitride deposition in hydrogen plasmas, 96

d.c.-bias
Role of surface pre-treatment in the CVD of diamond films on copper, 162
DC magnetron sputtering
Comparative study of thin film physical properties for TiN_x deposited by DC magnetron sputtering under temperatures less than 100°C on monocrystalline silicon and polycrystalline iron substrates, 357
Defect chemistry
The effects of cation-substitution on the ferroelectric properties of sol–gel derived PZT thin film for FRAM application, 531
Deposition
Deposition of silicon carbon nitride films by ion beam sputtering, 417
Diamond films
Field emission characteristic of diamond films grown by electron assisted chemical vapor deposition, 223
Structure and properties of diamond films deposited on porous silicon, 233
Diamond
Formation of intermetallic cobalt phases in the near surface region of cemented carbides for improved diamond layer deposition, 127
An investigation of the structural properties of diamond films deposited by pulsed bias enhanced hot filament CVD, 134
Effect of early methane introduction on the properties of nano-seeded MPCVD-diamond films, 139
Role of surface pre-treatment in the CVD of diamond films on copper, 162
Nitrogenation of diamond by glow discharge plasma treatment, 184
Diamond-like carbon
High rate deposition of diamond-like carbon films by magnetically enhanced plasma CVD, 146
The structural and electron field emission characteristics of pulsed laser deposited diamond-like carbon films with thermal treatment, 151

Optical and tribological properties of diamond-like carbon films synthesized by plasma immersion ion processing, 167
Electrical and optical properties of diamond-like carbon, 189
Improvement of the corrosion resistance of C/Al-composites by diamond-like carbon coatings, 214
Characterization of hydrogen-free diamond-like carbon films deposited by pulsed plasma technology, 246
Substrate induced DLC film thickness variations, 353
Diamond-like carbon coatings
Characterization and properties of diamond-like carbon films for magnetic recording application, 401
Diamond single crystal
Combustion flame synthesis: a promising technique to obtain diamond single crystal, 122
Direct dual ion beam deposition
The effects of substrates on carbon nitride thin films prepared by direct dual ion beam deposition, 239

Elastic modulus
High frequency scanning acoustic microscopy: a novel non-destructive surface analytical tool for assessment of coating-specific elastic moduli and tomographic study of subsurface defects, 347
Elastic recoil detection
Sputtering and chemical erosion during CN_x synthesis by ion beam assisted filtered cathodic arc evaporation, 64
Elastic-plastic aluminum substrates
Finite-element modeling of the stresses and fracture during the indentation of hard elastic films on elastic-plastic aluminum substrates, 303
Elecroless Ni–P deposits
Fatigue properties of an AISI 1045 steel coated with an electroless Ni–P deposit, 480
Electrical properties
Nitrogenation of diamond by glow discharge plasma treatment, 184
Electrical and optical properties of diamond-like carbon, 189
Electrical conduction processes in silicon nitride thin films prepared by r.f. magnetron sputtering using nitrogen gas, 456
Electrochemical corrosion
Improvement of the corrosion resistance of C/Al-composites by diamond-like carbon coatings, 214
Electroless nickel
Effect of thermal history on the microhardness of electroless Ni–P, 472
Electroless Ni–P deposits
Fatigue behavior of a quenched and tempered AISI 4340 steel coated with an electroless Ni–P deposit, 487
Electron assisted chemical vapor deposition
Field emission characteristic of diamond films grown by electron assisted chemical vapor deposition, 223
Electron cyclotron resonance chemical vapour deposition
Investigation of tungsten incorporated amorphous carbon film, 174
Electron field emission
The structural and electron field emission characteristics of pulsed laser deposited diamond-like carbon films with thermal treatment, 151
Electron microscopy
Observation of a decagonal quasicrystalline phase and quasicrystalline approximants in in situ heated thin films of the Al–Co–Cr–Fe–O system, 506
Ellipsometry
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513
Emissivity enhancement
The development and testing of emissivity enhancement coatings for themophotovoltaic (TPV) radiator applications, 17
Energy release
Evaluation of fracture toughness of ultra-thin amorphous carbon coatings deposited by different deposition techniques, 330
Evaluation software
The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media, 322
Excess Pb and O
Crystallization and ferroelectric behavior of sputter deposited PZT using a target containing excess Pb and O contents, 525

Fatigue
The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media, 322
Fatigue behavior
Fatigue properties of an AISI 1045 steel coated with an electroless Ni–P deposit, 480
Fatigue behavior of a quenched and tempered AISI 4340 steel coated with an electroless Ni–P deposit, 487
Fatigue cracks
Fatigue properties of an AISI 1045 steel coated with an electroless Ni–P deposit, 480
Fatigue behavior of a quenched and tempered AISI 4340 steel coated with an electroless Ni–P deposit, 487
Fatigue critical stresses
The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media, 322
Ferroelectric properties
Crystallization and ferroelectric behavior of sputter deposited PZT using a target containing excess Pb and O contents, 525
The effects of cation-substitution on the ferroelectric properties of sol–gel derived PZT thin film for FRAM application, 531
Field emission cathodes
Large area deposition of field emission cathodes for flat panel displays, 194
Field emission characteristics
Field emission characteristic of diamond films grown by electron assisted chemical vapor deposition, 223
Field emission characteristics of cesiated amorphous carbon films by negative carbon ion, 199
Film formation
Investigation of plasma-deposited ITO films by GIXR and GIXRD, 395
Film growth
Deposition of silicon carbon nitride films by ion beam sputtering, 417
Film stress
Characterization and properties of diamond-like carbon films for magnetic recording application, 401

Filtered arc deposition
Structural and optical properties of titanium oxide thin films deposited by filtered arc deposition, 6
Finite elements
Determination of coating mechanical properties using spherical indenters, 263
Finite element simulation of the development of residual stress in IAPVD films, 311
Finite-element modeling
Finite-element modeling of the stresses and fracture during the indentation of hard elastic films on elastic-plastic aluminum substrates, 303
Flat panel displays
Large area deposition of field emission cathodes for flat panel displays, 194
Fourier transform infrared spectroscopy
Deposition of carbon nitride films by ionised magnetron sputtering, 117
Fracture toughness
Evaluation of fracture toughness of ultra-thin amorphous carbon coatings deposited by different deposition techniques, 330
Frictional force measurements
Critical loads and effective frictional force measurements in the industrial scratch testing of TiN on M2 tool steel, 277
Functionally graded materials
Structural analysis of $(Ti_{1-x}Al_x)N$ graded coatings deposited by reactive magnetron sputtering, 380

GaAs
Investigation on the surface characteristics of GaAs after sulfuric-vapor treatment, 423
Bonding and structural changes of natively oxidized GaAs surface during ion induced deposition of Au, 435
Gas barrier film
A microstructural study of transparent metal oxide gas barrier films, 500
Gas sensor
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
GIXR and GIXRD
Investigation of oxidation process on plasma treated thin Al-films by GIXR and GIXRD, 494
Glow discharge plasma treatment
Nitrogenation of diamond by glow discharge plasma treatment, 184
Graphite
Effect of early methane introduction on the properties of nano-seeded MPCVD-diamond films, 139
Characterization of hydrogen-free diamond-like carbon films deposited by pulsed plasma technology, 246
Grazing incidence X-ray diffractometry
Investigation of plasma-deposited ITO films by GIXR and GIXRD, 395
Grazing incidence X-ray reflectometry
Investigation of plasma-deposited ITO films by GIXR and GIXRD, 395
Growth and mechanical properties
Crystalline SiCN: a hard material rivals to cubic BN, 112
Growth mode
In situ spectroscopic ellipsometry as a surface-sensitive tool to probe thin film growth, 41
Stress and surface studies of SILAR grown CdS thin films on GaAs(100), 430

Hard coatings
Effect of ion bombardment on the properties of B_4C thin films deposited by RF sputtering, 210
Structural analysis of $(Ti_{1-x}Al_x)N$ graded coatings deposited by reactive magnetron sputtering, 380
Hard elastic films
Finite-element modeling of the stresses and fracture during the indentation of hard elastic films on elastic-plastic aluminum substrates, 303
Hardness
Structural and optical properties of titanium oxide thin films deposited by filtered arc deposition, 6
Microstructure of CrN coatings produced by PVD techniques, 465
Hardness modeling
Effect of thermal history on the microhardness of electroless Ni–P, 472
Harsh environments
SiC MEMS: opportunities and challenges for applications in harsh environments, 518
High-rate deposition
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513
Hollow cathode discharge
Effect of processing parameters on the microstructure and mechanical properties of TiN film on stainless steel by HCD ion plating, 440
Hot filament
Formation of intermetallic cobalt phases in the near surface region of cemented carbides for improved diamond layer deposition, 127
Hot-filament chemical vapor deposition
An investigation of the structural properties of diamond films deposited by pulsed bias enhanced hot filament CVD, 134
Nitrogenated diamond produced by introducing ammonia into the gas feed in hot-filament CVD, 157
Role of surface pre-treatment in the CVD of diamond films on copper, 162
Structure and properties of diamond films deposited on porous silicon, 233
Hydrocarbon coatings
Modeling the functional performance of plasma polymerized thin films, 49
Hydrogen plasmas
The mechanism of cubic boron nitride deposition in hydrogen plasmas, 96
Hydrogenated amorphous silicon
In situ analysis of aluminum enhanced crystallization of hydrogenated amorphous silicon (a-Si:H) using X-ray diffraction, 343
Hydroxylamine sulfate
The novel precleaning treatment for selective tungsten chemical vapor deposition, 451

Impact test
The concept of an advanced impact tester supported by evaluation software for the fatigue strength characterization of hard layered media, 322
In situ heating
Observation of a decagonal quasicrystalline phase and quasicrystalline approximants in in situ heated thin films of the Al–Co–Cr–Fe–O system, 506
Indentation
Micromechanical characterisation of plasma treated polymer surfaces, 290
Indentation measurements
New possibilities of mechanical surface characterization with spherical indenters by comparison of experimental and theoretical results, 284
Indentation test
Determination of coating mechanical properties using spherical indenters, 263
Indium tin oxide
Investigation of plasma-deposited ITO films by GIXR and GIXRD, 395
Inductively coupled plasma sources
An array of inductively coupled plasma sources for large area plasma, 252
Infrared emittance
Infrared emittance modulation devices using electrochromic crystalline tungsten oxide, polymer conductor, and nickel oxide, 26
Infrared spectroscopy
CN_x thin films grown by pulsed laser deposition: Raman, infrared and X-ray photoelectron spectroscopy study, 219
Characterization of ion-assisted pulsed laser deposited cubic boron nitride films, 256
Interface
Characterization and properties of diamond-like carbon films for magnetic recording application, 401
Interface roughness
High resolution thickness and interface roughness characterization in multilayer thin films by grazing incidence X-ray reflectivity, 385
Interfacial reaction
Bonding and structural changes of natively oxidized GaAs surface during ion induced deposition of Au, 435
Intermetallic phases
Formation of intermetallic cobalt phases in the near surface region of cemented carbides for improved diamond layer deposition, 127
Interphase
Micromechanical characterisation of plasma treated polymer surfaces, 290
Ion assisted physical vapour deposition
Finite element simulation of the development of residual stress in IAPVD films, 311
Ion beam assisted deposition
The structural, optical and secondary electron emission properties of MgO and Mg–O–Cs thin films prepared by ion beam assisted deposition, 55
Synthesis and characterization of c-BN films prepared by ion beam assisted deposition and triode sputtering, 89
Ion beam sputtering
Deposition of silicon carbon nitride films by ion beam sputtering, 417
Ion bombardment
Effect of ion bombardment on the properties of B_4C thin films deposited by RF sputtering, 210
Ionised magnetron sputtering
Deposition of carbon nitride films by ionised magnetron sputtering, 117

Large area deposition
Large area deposition of field emission cathodes for flat panel displays, 194
Laser deposition
Characterization of YBCO superconducting films fabricated by pulsed laser deposition, 461
Layer adhesion
The effect of PVD layer constitution on surface free energy, 367
Lead salt alloys
Composition dependent structural properties of $Pb_{1-x}Eu_xSe$ thin films, 12
Low-energy plasma beam deposition
Low-energy plasma beam deposition of carbon nitride layers with $-C_3N_4$-like fractions, 73

Magnetic field
High rate deposition of diamond-like carbon films by magnetically enhanced plasma CVD, 146
Magnetron sputtering
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
Investigation of the valence band states of reactively sputtered carbon nitride films, 79
Effect of substrate bias on the bonding structure of carbon nitride thin films, 85
Effect of ion bombardment on the properties of B_4C thin films deposited by RF sputtering, 210
Matrix assisted pulsed laser evaporation
Growth of organic thin films by the matrix assisted pulsed laser evaporation (MAPLE) technique, 536
Mechanical deflections
Thermally-actuated cantilever beam for achieving large in-plane mechanical deflections, 295
Mechanical properties
Characterization of pulsed laser deposited h-BN films and h-BN/c-BN layer systems, 105
Determination of coating mechanical properties using spherical indenters, 263
New possibilities of mechanical surface characterization with spherical indenters by comparison of experimental and theoretical results, 284
Metal matrix composites
Improvement of the corrosion resistance of C/Al-composites by diamond-like carbon coatings, 214
MgO
The structural, optical and secondary electron emission properties of MgO and Mg–O–Cs thin films prepared by ion beam assisted deposition, 55
Mg–O–Cs
The structural, optical and secondary electron emission proper-

ties of MgO and Mg–O–Cs thin films prepared by ion beam assisted deposition, 55
Microelectrochemical systems
SiC MEMS: opportunities and challenges for applications in harsh environments, 518
Microelectromechanical systems
Thermally-actuated cantilever beam for achieving large in-plane mechanical deflections, 295
Microhardness
Comparative study of thin film physical properties for TiN_x deposited by DC magnetron sputtering under temperatures less than 100°C on monocrystalline silicon and polycrystalline iron substrates, 357
Effect of processing parameters on the microstructure and mechanical properties of TiN film on stainless steel by HCD ion plating, 440
Microhardness measurements
Effect of thermal history on the microhardness of electroless Ni–P, 472
Microstructure
Characterization of pulsed laser deposited h-BN films and h-BN/c-BN layer systems, 105
Effect of processing parameters on the microstructure and mechanical properties of TiN film on stainless steel by HCD ion plating, 440
Microstructure of CrN coatings produced by PVD techniques, 465
A microstructural study of transparent metal oxide gas barrier films, 500
Mixing-Roughness-Information model
Original and sputtering induced interface roughness in AES sputter depth profiling of SiO_2/Ta_2O_5 multilayers, 390
Multiple cracking
Effects of temperature on the multiple cracking progress of submicron thick glass films deposited on a polymer substrate, 337

Nanoindentation
Evaluation of fracture toughness of ultra-thin amorphous carbon coatings deposited by different deposition techniques, 330
Nanoparticle beams
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513
Nanoparticle films
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513
Negative carbon ions
Field emission characteristics of cesiated amorphous carbon films by negative carbon ion, 199
Negative substrate-bias effects
Combustion flame synthesis: a promising technique to obtain diamond single crystal, 122
$(NH_4)_2S_x$
Investigation on the surface characteristics of GaAs after sulfuric-vapor treatment, 423
Nickel oxide
Infrared emittance modulation devices using electrochromic crystalline tungsten oxide, polymer conductor, and nickel oxide, 26
Nickel silicide
Effects of nitrogen ion implantation on the formation of nickel silicide contacts on shallow junctions, 412
Nitrogen content
Comparative study of thin film physical properties for TiN_x deposited by DC magnetron sputtering under temperatures less than 100°C on monocrystalline silicon and polycrystalline iron substrates, 357
Nitrogen ion implantation
Effects of nitrogen ion implantation on the formation of nickel silicide contacts on shallow junctions, 412
Nitrogenated diamond
Nitrogenated diamond produced by introducing ammonia into the gas feed in hot-filament CVD, 157
Nucleation
An investigation of the structural properties of diamond films deposited by pulsed bias enhanced hot filament CVD, 134

Optical band gap
Structural and optical properties of titanium oxide thin films deposited by filtered arc deposition, 6
Optical emission spectroscopy
Deposition of carbon nitride films by ionised magnetron sputtering, 117
Optical functions
Optical properties of photochromic organic–inorganic composites, 1
Optical properties
Optical and tribological properties of diamond-like carbon films synthesized by plasma immersion ion processing, 167
Electrical and optical properties of diamond-like carbon, 189
Interesting optical properties of films composed of very small grains formed from a high-rate nanoparticle beam, 513
Organic thin films
Growth of organic thin films by the matrix assisted pulsed laser evaporation (MAPLE) technique, 536
Oxidation
Stress and oxidation in CuNi thin films, 316
Oxidation process
Investigation of oxidation process on plasma treated thin Al-films by GIXR and GIXRD, 494

Passivation
The novel precleaning treatment for selective tungsten chemical vapor deposition, 451
Photochromic composite film
Optical properties of photochromic organic–inorganic composites, 1
Photoelectron spectroscopy
Nitrogenation of diamond by glow discharge plasma treatment, 184
Plain carbon steels
Fatigue properties of an AISI 1045 steel coated with an electroless Ni–P deposit, 480
Fatigue behavior of a quenched and tempered AISI 4340 steel coated with an electroless Ni–P deposit, 487
Plasma
High rate deposition of diamond-like carbon films by magneti-

cally enhanced plasma CVD, 146
Plasma chemical vapor deposition
Plasma chemical vapor deposition of thin carbon nitride films utilizing transport reactions, 406
Plasma immersion ion processing
Optical and tribological properties of diamond-like carbon films synthesized by plasma immersion ion processing, 167
Plasma polymerized thin films
Modeling the functional performance of plasma polymerized thin films, 49
Polycrystalline films
Composition dependent structural properties of $Pb_{1-x}Eu_xSe$ thin films, 12
Polymer conductor
Infrared emittance modulation devices using electrochromic crystalline tungsten oxide, polymer conductor, and nickel oxide, 26
Polymer substrate
Effects of temperature on the multiple cracking progress of submicron thick glass films deposited on a polymer substrate, 337
Polymer thin films
Growth of organic thin films by the matrix assisted pulsed laser evaporation (MAPLE) technique, 536
Polymer/metal interphase
Internal stresses, Young's modulus and practical adhesion of organic coatings applied onto 5754 aluminium alloy, 270
Poly-SiC films
Growth of polycrystalline SiC films on SiO_2 and Si_3N_4 by APCVD, 179
Porous silicon
Structure and properties of diamond films deposited on porous silicon, 233
Practical adhesion
Internal stresses, Young's modulus and practical adhesion of organic coatings applied onto 5754 aluminium alloy, 270
Precleaning
The novel precleaning treatment for selective tungsten chemical vapor deposition, 451
Protective coatings
Unique Brewster-angle window transparent to both polarizations, 60
Pulsed bias
An investigation of the structural properties of diamond films deposited by pulsed bias enhanced hot filament CVD, 134
Characterization of hydrogen-free diamond-like carbon films deposited by pulsed plasma technology, 246
Pulsed laser deposition
Characterization of pulsed laser deposited h-BN films and h-BN/c-BN layer systems, 105
The structural and electron field emission characteristics of pulsed laser deposited diamond-like carbon films with thermal treatment, 151
Characterization of ion-assisted pulsed laser deposited cubic boron nitride films, 256
PZT
Crystallization and ferroelectric behavior of sputter deposited PZT using a target containing excess Pb and O contents, 525

Quantitative simulation
Bonding and structural changes of natively oxidized GaAs surface during ion induced deposition of Au, 435
Quartz dielectric window
An array of inductively coupled plasma sources for large area plasma, 252
Quasicrystal
Observation of a decagonal quasicrystalline phase and quasicrystalline approximants in in situ heated thin films of the Al–Co–Cr–Fe–O system, 506

r.f. Sputtering
Electrical conduction processes in silicon nitride thin films prepared by r.f. magnetron sputtering using nitrogen gas, 456
Raman spectroscopy
CN_x thin films grown by pulsed laser deposition: Raman, infrared and X-ray photoelectron spectroscopy study, 219
Characterization and properties of diamond-like carbon films for magnetic recording application, 401
Raman transmission electron microscopy
Synthesis and characterization of c-BN films prepared by ion beam assisted deposition and triode sputtering, 89
Reaction layer
The effect of PVD layer constitution on surface free energy, 367
Reactive ion etching
An array of inductively coupled plasma sources for large area plasma, 252
Reactive magnetron sputtering
Modeling the functional performance of plasma polymerized thin films, 49
Reactive sputtering
Structural analysis of $(Ti_{1-x}Al_x)N$ graded coatings deposited by reactive magnetron sputtering, 380
Residual stresses
Internal stresses, Young's modulus and practical adhesion of organic coatings applied onto 5754 aluminium alloy, 270
Finite element simulation of the development of residual stress in IAPVD films, 311
Stress and surface studies of SILAR grown CdS thin films on GaAs(100), 430
Resistivity
Investigation of the valence band states of reactively sputtered carbon nitride films, 79
Characterization and properties of diamond-like carbon films for magnetic recording application, 401
Ring resonator
Characterization of YBCO superconducting films fabricated by pulsed laser deposition, 461

Scanning electron microscopy
Combustion flame synthesis: a promising technique to obtain diamond single crystal, 122
Scratch hardness
Micromechanical characterisation of plasma treated polymer surfaces, 290
Scratch testing
Critical loads and effective frictional force measurements in the industrial scratch testing of TiN on M2 tool steel, 277
Secondary electron emission
The structural, optical and secondary electron emission properties of MgO and Mg–O–Cs thin films prepared by ion beam

assisted deposition, 55
Secondary ion mass spectroscopy
Characterization of SiO_xN_y anti-reflective coatings using SIMS and RBS/HFS, 364
Selective CVD-W
The novel precleaning treatment for selective tungsten chemical vapor deposition, 451
Selective etching
The mechanism of cubic boron nitride deposition in hydrogen plasmas, 96
Sensing mechanism
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
Shallow junction
Effects of nitrogen ion implantation on the formation of nickel silicide contacts on shallow junctions, 412
SiC
SiC MEMS: opportunities and challenges for applications in harsh environments, 518
Silicon carbide nitride
Wide band gap silicon carbon nitride films deposited by electron cyclotron resonance plasma chemical vapor deposition, 205
Silicon carbon nitride film
Deposition of silicon carbon nitride films by ion beam sputtering, 417
Si_3N_4
Growth of polycrystalline SiC films on SiO_2 and Si_3N_4 by APCVD, 179
Silicon nitride
Electrical conduction processes in silicon nitride thin films prepared by r.f. magnetron sputtering using nitrogen gas, 456
Silicon oxide
Effects of temperature on the multiple cracking progress of submicron thick glass films deposited on a polymer substrate, 337
SiO_2
Growth of polycrystalline SiC films on SiO_2 and Si_3N_4 by APCVD, 179
Silicon oxynitride film
Characterization of SiO_xN_y anti-reflective coatings using SIMS and RBS/HFS, 364
Sol–gel preparation
The effects of cation-substitution on the ferroelectric properties of sol–gel derived PZT thin film for FRAM application, 531
Sol–gel processing
Optical properties of photochromic organic–inorganic composites, 1
sp^3/sp^2 ratio in DLC film
The structural and electron field emission characteristics of pulsed laser deposited diamond-like carbon films with thermal treatment, 151
Spectroscopic ellipsometry
Optical properties of photochromic organic–inorganic composites, 1
In situ spectroscopic ellipsometry as a surface-sensitive tool to probe thin film growth, 41
Spherical indenter
Determination of coating mechanical properties using spherical indenters, 263
New possibilities of mechanical surface characterization with spherical indenters by comparison of experimental and theoretical results, 284
Sputter deposition
In situ spectroscopic ellipsometry as a surface-sensitive tool to probe thin film growth, 41
Crystallization and ferroelectric behavior of sputter deposited PZT using a target containing excess Pb and O contents, 525
Sputter depth profiling
Original and sputtering induced interface roughness in AES sputter depth profiling of SiO_2/Ta_2O_5 multilayers, 390
Sputtering and chemical erosion
Sputtering and chemical erosion during CN_x synthesis by ion beam assisted filtered cathodic arc evaporation, 64
Stability
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
Stress
Stress and oxidation in CuNi thin films, 316
Substrate heating
Crystallization and ferroelectric behavior of sputter deposited PZT using a target containing excess Pb and O contents, 525
Subsurface defects
High frequency scanning acoustic microscopy: a novel nondestructive surface analytical tool for assessment of coating-specific elastic moduli and tomographic study of subsurface defects, 347
Sulfuric vapor
Investigation on the surface characteristics of GaAs after sulfuric-vapor treatment, 423
Surface damage
High frequency scanning acoustic microscopy: a novel nondestructive surface analytical tool for assessment of coating-specific elastic moduli and tomographic study of subsurface defects, 347
Surface energy
The effect of PVD layer constitution on surface free energy, 367
Surface tension
The effect of PVD layer constitution on surface free energy, 367

Temperature effect
Effects of temperature on the multiple cracking progress of submicron thick glass films deposited on a polymer substrate, 337
Thermally-actuated beam
Thermally-actuated cantilever beam for achieving large in-plane mechanical deflections, 295
Thermophotovoltaic radiator
The development and testing of emissivity enhancement coatings for themophotovoltaic (TPV) radiator applications, 17
Thickness
High resolution thickness and interface roughness characterization in multilayer thin films by grazing incidence X-ray reflectivity, 385
Thin films
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35
In situ spectroscopic ellipsometry as a surface-sensitive tool to

probe thin film growth, 41
Stress and surface studies of SILAR grown CdS thin films on GaAs(100), 430
Simple reflectometric method for measurement of weakly absorbing films, 446
Observation of a decagonal quasicrystalline phase and quasicrystalline approximants in in situ heated thin films of the Al–Co–Cr–Fe–O system, 506
Time-of-flight secondary ion mass spectrometry
Substrate induced DLC film thickness variations, 353
$(Ti_{1-x}Al_x)N$
Structural analysis of $(Ti_{1-x}Al_x)N$ graded coatings deposited by reactive magnetron sputtering, 380
Titanium nitride
XPS analyses of TiN films on Cu substrates after annealing in the controlled atmosphere, 374
Effect of processing parameters on the microstructure and mechanical properties of TiN film on stainless steel by HCD ion plating, 440
Titanium nitride coatings
Critical loads and effective frictional force measurements in the industrial scratch testing of TiN on M2 tool steel, 277
Titanium nitride thin film
Comparative study of thin film physical properties for TiN_x deposited by DC magnetron sputtering under temperatures less than 100°C on monocrystalline silicon and polycrystalline iron substrates, 357
Titanium oxide thin film
Structural and optical properties of titanium oxide thin films deposited by filtered arc deposition, 6
Transmission electron microscopy
Characterization of ion-assisted pulsed laser deposited cubic boron nitride films, 256
Substrate induced DLC film thickness variations, 353
Transparent packaging
Modeling the functional performance of plasma polymerized thin films, 49
Tugnsten
Investigation of tungsten incorporated amorphous carbon film, 174
Tungsten oxide
Infrared emittance modulation devices using electrochromic crystalline tungsten oxide, polymer conductor, and nickel oxide, 26
Valence band
Investigation of the valence band states of reactively sputtered carbon nitride films, 79
Wear resistance
Optical and tribological properties of diamond-like carbon films synthesized by plasma immersion ion processing, 167
Wettability
Characterization and properties of diamond-like carbon films for magnetic recording application, 401
Wide band gap
Wide band gap silicon carbon nitride films deposited by electron cyclotron resonance plasma chemical vapor deposition, 205
X-ray diffraction
Effect of early methane introduction on the properties of nano-seeded MPCVD-diamond films, 139
In situ analysis of aluminum enhanced crystallization of hydrogenated amorphous silicon (a-Si:H) using X-ray diffraction, 343
X-ray photoelectron spectroscopy
XPS analyses of TiN films on Cu substrates after annealing in the controlled atmosphere, 374
Bonding and structural changes of natively oxidized GaAs surface during ion induced deposition of Au, 435
X-ray reflectivity
High resolution thickness and interface roughness characterization in multilayer thin films by grazing incidence X-ray reflectivity, 385
Young's modulus
Internal stresses, Young's modulus and practical adhesion of organic coatings applied onto 5754 aluminium alloy, 270
New possibilities of mechanical surface characterization with spherical indenters by comparison of experimental and theoretical results, 284
Microstructure of CrN coatings produced by PVD techniques, 465
$(Zn_2In_2O_5)_x$–$(MgIn_2O_4)_{1-x}$ multicomponent oxide
Stability and sensing mechanism of high sensitivity chlorine gas sensors using transparent conducting oxide thin films, 35